

## ABSTRACT

One DC-DC converter includes primary side circuit between high and low side inputs including first primary winding of first transformer, and auxiliary section; and rectifier circuits, with separate secondary windings of first transformer, and in parallel with one another and output and capacitor; an output capacitor between outputs and across rectifier circuit. Auxiliary causes

5 transfer of power from first primary to first secondary winding and operation without saturation. Another converter includes primary side circuit including primary winding of plurality of transformers, and an auxiliary section; a rectifier circuit having secondary winding of the plurality of transformers, the rectifier circuit in parallel with output and capacitor; an output capacitor between outputs and across rectifier circuit. Auxiliary section includes switches for

10 connecting and disconnecting primary windings from input, and for resetting transformers. Alternatively, auxiliary section includes switches and capacitors. Switches and capacitors in auxiliary section shared between transformers.